



# UNITED STATES PATENT AND TRADEMARK OFFICE

CH  
UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/016,524	12/10/2001	Theodore Martin Boyl-Davis	38190/205479	9593

826 7590 09/10/2003

ALSTON & BIRD LLP  
BANK OF AMERICA PLAZA  
101 SOUTH TRYON STREET, SUITE 4000  
CHARLOTTE, NC 28280-4000

EXAMINER

NASH, BRIAN D

ART UNIT PAPER NUMBER

3721

DATE MAILED: 09/10/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

N.K.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	10/016,524	BOYL-DAVIS ET AL.	
Examiner	Brian D Nash	Art Unit	3721

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1) Responsive to communication(s) filed on 28 July 2003.

2a) This action is **FINAL**.                            2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4) Claim(s) 1-28 is/are pending in the application.

4a) Of the above claim(s) 17-28 is/are withdrawn from consideration.

5) Claim(s) \_\_\_\_\_ is/are allowed.

6) Claim(s) 1-5,10 and 12 is/are rejected.

7) Claim(s) 6-9,11 and 13-16 is/are objected to.

8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on 10 December 2001 is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) The proposed drawing correction filed on \_\_\_\_\_ is: a) approved b) disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12) The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some \* c) None of:

1. Certified copies of the priority documents have been received.

2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.

3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) The translation of the foreign language provisional application has been received.

15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

1) Notice of References Cited (PTO-892)

2) Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2,4.

4) Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.

5) Notice of Informal Patent Application (PTO-152)

6) Other: \_\_\_\_\_.

## **DETAILED ACTION**

1. This action is in response to applicant's response received 28 June 2004.

### ***Election/Restrictions***

2. Applicant's election of Group I, claims 1-16 in Paper No. 5 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-5, 10, and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 3,575,364 to Frederick in view of US 5,468,099 to Wheetley et al. Frederick discloses the invention substantially as claimed including an apparatus for guiding and positioning a machine component relative to a work piece surface having first and second rails (24) that are spaced apart and substantially parallel to each other, a carriage (C) having a connecting member connected between the rails (see Fig. 1) and structured to support a machine component wherein the carriage slidably engaging the rails via sets of rollers (column 2, lines 29+), and vacuum chambers (18) connected to a rail at spaced intervals for releasably attaching the track to the

work piece surface. Frederick does not disclose a plurality of vacuum devices attached to each rail wherein the vacuum devices are vacuum cups. Wheetley et al teach the use of a plurality of vacuum cups(66-72) attached to rails (56,58) for releasably attaching the apparatus to the work piece.

In view of Wheetley et al, it would have been obvious to one having ordinary skill in the art at the time of the invention to have combined the plurality of vacuum cups with Frederick's rails for the purpose of releasably attaching each of the rails to the work piece surfaces.

Examiner notes that although Frederick does not explicitly disclose the rollers are connected to the rails by flexible mounts, it is implied that the rollers are flexibly mounted on the rails since Frederick discloses (column 2, lines 19+) that track is sufficiently flexible to follow a variety of contours.

Regarding claim 2, Frederick does not show three-dimensional axes in his figures. However, the examiner has construed a first bending axis that is normal to the work piece surface, as an axis coming out of the page and a second bending axis as an axis running from the bottom to the top of the page (see Fig 1).

Regarding claim 12, Frederick does not show a drill, but discloses (column 2, lines 39+) that tools other than the torch shown may be substituted for various machining purposes.

#### *Allowable Subject Matter*

5. Claims 6-9, 11, and 13-16 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Kozak et al, Buttrick et al, Hansen, Jassby et al, Kosmowski, Eklund Sr., Prudhomme et al, and Passa et al are cited to show related references.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian Nash whose telephone number is (703) 305-4959. The examiner can normally be reached on Monday – Thursday from 8 a.m. to 5 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rinaldi I. Rada can be reached at (703) 308-2187.

The fax numbers for this Group are:

Before Final	703-872-9302
After Final	703-872-9303
Customer Service	703-872-9301

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-1148.

Brian D. Nash  
3 September 2003



Rinaldi I. Rada  
Supervisory Patent Examiner  
Group 3700